

Supplementary material for:

**HYPERCHOLESTEROLEMIA INDUCES UPREGULATION OF K_{ACh} CARDIAC
CURRENTS *VIA* A MECHANISM INDEPENDENT OF PIP_2 AND $G\beta\gamma$.**

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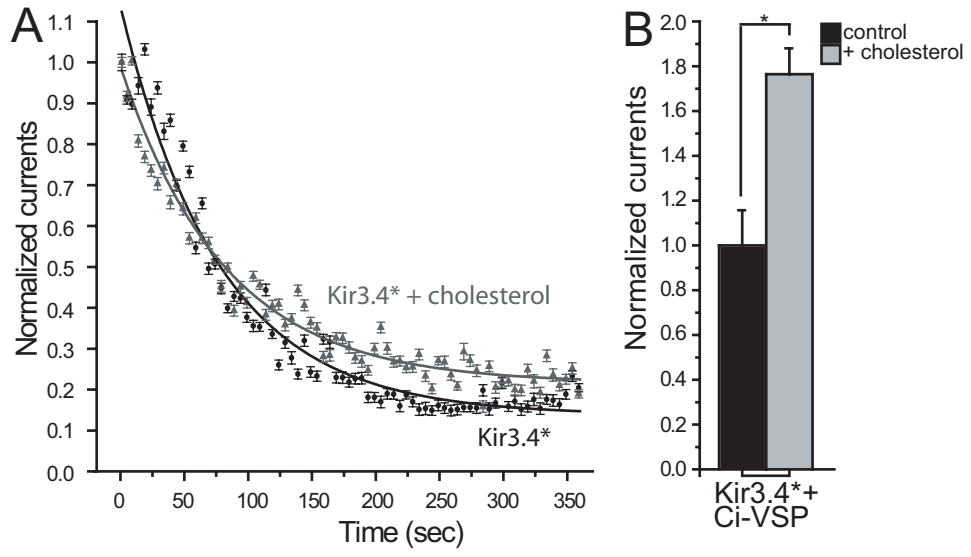
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Figure Captions for Supplementary Figures

Supplementary Figure S1. (A) Normalized current run-down of Kir3.4* at -80mV in excised inside-out macropatches from control and cholesterol-enriched *Xenopus* oocytes ($n=5-7$). (B) Whole-cell basal currents recorded in oocytes at -80mV showing the effect of cholesterol enrichment on Kir3.4* in oocytes coexpressing Kir3.4* and Ci-VSP. The currents are normalized relative to untreated oocytes expressing Kir3.4* ($n=6$ each).

Supplementary Figure S2. (A) Whole-cell currents recorded in oocytes at -80 mV for Kir3.4*, for Kir3.4* coexpressed with $G\beta_1\gamma_2$ and for cholesterol enriched oocytes expressing Kir3.4*. All currents are normalized relative to Kir3.4* ($n=15-34$). (B) Whole-cell currents recorded in oocytes at -80 mV for Kir3.1/Kir3.4, for Kir3.1/Kir3.4 coexpressed with $G\beta_1\gamma_2$ and for cholesterol enriched oocytes expressing Kir3.1/Kir3.4. All currents are normalized relative to Kir3.1/Kir3.4 ($n=11-12$). (C) Whole-cell currents recorded in oocytes at -80 mV for Kir3.4*, for Kir3.4* coexpressed with $\beta\text{ARK-PH}$ and for cholesterol enriched oocytes expressing Kir3.4*. All currents are normalized relative to Kir3.4* ($n=12-20$). (D) Whole-cell currents recorded in oocytes at -80 mV for Kir3.1/Kir3.4, for Kir3.1/Kir3.4 coexpressed with $\beta\text{ARK-PH}$ and for cholesterol enriched oocytes expressing Kir3.1/Kir3.4. All currents are normalized relative to Kir3.1/Kir3.4 ($n=10-12$). (E) Whole-cell currents recorded at -80mV for control and cholesterol-enriched oocytes expressing Kir3.4* and Kir3.4*E339Q. The currents are normalized to Kir3.4* basal currents ($n=10-12$).

Supplementary Figure S1



Supplementary Figure S2

